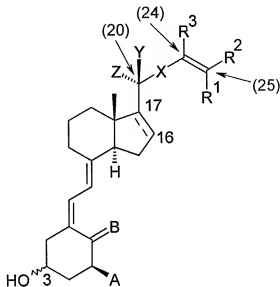


AMENDMENTS TO THE CLAIMS

1. (Currently amended) A compound according to formula I

**I**

in which formula

R1 and R2, which ~~are~~ may be the same or different, represent halogen, (C₁-C₆)hydrocarbonyl, optionally substituted with ~~one or two hydroxyl group~~ or one or more fluorine atoms, or, together with the carbon atom to which they are both attached, R1 and R2 form a (C₃-C₆)carbocyclic ring;

~~or one of R1 and R2 taken together with R3 forms a direct bond, such that a triple bond is constituted;~~

~~or R1 and R2 both represent hydrogen;~~

R3 when not forming a direct bond with one of R1 and R2 represents hydrogen or methyl(C₁-C₃)hydrocarbonyl;

X represents (*E*)-ethynylene or [(,)] (*Z*)-ethynylene ~~ethynylene~~ or a bond ;

Y and Z independently represent hydrogen or methyl;

the bond between C#16 and C#17 is depicted with a dotted line to illustrate that said bond may be either is a single bond, in which case the projection of the ring substituent is beta ~~or~~ a double bond ;

A represents hydroxyl ~~1-fluorine or hydrogen~~ ;

B represents CH_2 ~~or H_2~~ ;

the configuration in the 3-position corresponds to the same configuration as in natural vitamin D_3 (normal), or the configuration in the 3-position is opposite to natural vitamin D_3 (epi);
with the proviso that when X represents (*E*)-ethylene or (*Z*)-ethylene, one of R1 and R2 taken together with R3 may not form a direct bond, such that a triple bond is constituted;
with the proviso that when X represents a bond R1 and R2 are not hydrogen;
with the further proviso that the compound of formula I is not 3(*S*)-hydroxy-9,10-secosterosta-5(*Z*),7(*E*),10(19),22(*E*),24-penta-ene;
and *in vivo* hydrolysable esters and stereo isomeric forms thereof.

2. (Currently amended) A compound according to claim 1 wherein R1 and R2 when taken separately, independently represent bromo, chloro, methyl, ethyl, trifluoromethyl, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 1-propyl, 2-propyl, cyclopropyl, 2-hydroxy-2-propyl, 2-methyl-2-propyl, ~~or 3-pentyl or 3-hydroxy-3-pentyl~~.

3. (Currently amended) A compound according to claim 1 wherein R1 and R2 are the same and both represent ~~hydrogen~~, methyl, ethyl, bromo, ~~chloro~~, or trifluoromethyl.

4. (Currently amended) A compound according to claim 1 wherein R1 and R2 when taken together with the carbon atom to which they are both attached to form a C_3 carbocyclic ring or [[,]] a C_4 carbocyclic ring, ~~a C_5 carbocyclic ring, or a C_6 carbocyclic ring.~~

5. (Currently amended) A compound according to claim 4 wherein R1 and R2 when taken together are ethylene or [[,]] tri-methylene, tetra-methylene, or penta-methylene, such as R1 and R2 when taken together with the carbon atom to which they are both attached to form a C_3 carbocyclic ring or [[,]] a C_4 carbocyclic ring, ~~a C_5 carbocyclic ring, or a C_6 carbocyclic ring.~~

6.-8. (Cancelled).

9. (Currently amended) A compound according to ~~claim 7~~ claim 1 wherein R1 represents $-\text{CMe}_3$, $-\text{C}(\text{OH})\text{Me}_{27}$ or $-\text{C}(\text{OH})\text{Et}_2$.

10.-11. (Cancelled)

12. (Previously presented) A compound according to claim 1 wherein the configuration in the 3-position corresponds to the configuration of natural vitamin D₃ (normal).

13. (Previously presented) A compound according to claim 1 wherein the configuration in the 3-position corresponds to the opposite configuration to that of natural vitamin D₃ (epi).

14. (Currently amended) A compound according to claim 1 selected from the list consisting of

1(S),3(R)-Dihydroxy-9,10-secocholesta-5(Z),7(E),10(19), 22(E),24-penta-ene (Compound 1),
 1(S),3(R)-Dihydroxy-9,10-secocholesta-5(Z),7(E),10(19), 22(Z),24-penta-ene (Compound 2),
 20(S),1(S),3(R)-Dihydroxy-9,10-secocholesta-5(Z),7(E),10(19), 22(E),24-penta-ene (Compound 3),
 1(S),3(R)-Dihydroxy-9,10-seco-26,27-cyclo-cholesta-5(Z),7(E),10(19), 22(E),24-penta-ene (Compound 4),
 20(S),1(S),3(R)-Dihydroxy-9,10-seco-26,27-cyclo-cholesta-5(Z),7(E),10(19), 22(E),24-penta-ene (Compound 5),
 1(S),3(R)-Dihydroxy-9,10-seco-26,27-methano-cholesta-5(Z),7(E),10(19), 22(E),24-penta-ene (Compound 6),
 20(S),1(S),3(R)-Dihydroxy-9,10-seco-26,27-methano-cholesta-5(Z),7(E),10(19), 22(E),24-penta-ene (Compound 7),
 1(S),3(R)-Dihydroxy-20(S)-(4,4-dibromo-1,3-butadien-1-yl)-9,10-seco-pregna-5(Z),7(E),10(19)-triene (Compound 8),
 1(S),3(R),26-Trihydroxy-9,10-secocholesta-5(Z),7(E),10(19), 22(E),24(E)-penta-ene (Compound 9),
 20(S),1(S),3(R),26-Trihydroxy-9,10-secocholesta-5(Z),7(E),10(19), 22(E),24(E)-penta-ene (Compound 10);

1(S),3(R),26-Trihydroxy-9,10-secocholesta-5(Z),7(E),10(19),22(E),24(Z)-penta-ene (Compound 11);

20(S),1(S),3(R),26-Trihydroxy-9,10-secocholesta-5(Z),7(E),10(19),22(E),24(Z)-penta-ene (Compound 12);

1(S),3(R)-Dihydroxy-20(R)-(4-methyl-5-ethyl-5-hydroxy-1(E),3(E)-heptadienyl)-9,10-secopregna-5(Z),7(E),10(19)-triene (Compound 13);

1(S),3(R)-Dihydroxy-20(R)-(3-cyclopropyl-1(E),3-butadienyl)-9,10-secopregna-5(Z),7(E),10(19)-triene (Compound 14);

1(S),3(R)-Dihydroxy-9,10-secocholesta-5(Z),7(E),10(19),24-tetra-ene-22-yne (Compound 15);

1(S),3(R)-Dihydroxy-20(R)-(5-methyl-5-hydroxy-1,3-hexadiynyl)-9,10-secopregna-5(Z),7(E),10(19)-triene (Compound 16);

1(S),3(R)-Dihydroxy-20(S)-(5-ethyl-5-hydroxy-1,3-heptadiynyl)-9,10-secopregna-5(Z),7(E),10(19)-triene (Compound 17);

1(S),3(R)-Dihydroxy-20(R)-(5-ethyl-5-hydroxy-1,3-heptadiynyl)-9,10-secopregna-5(Z),7(E),10(19)-triene (Compound 18);

1(S),3(R)-Dihydroxy-20(R)-(5,5-dimethyl-1,3-hexadiynyl)-9,10-secopregna-5(Z),7(E),10(19)-triene (Compound 19);

1(S),3(R)-Dihydroxy-20(S)-(5,5-dimethyl-1,3-hexadiynyl)-9,10-secopregna-5(Z),7(E),10(19)-triene (Compound 20);

1(S)-Fluoro-3(R)-hydroxy-9,10-secocholesta-5(Z),7(E),10(19),22(E),24-penta-ene (Compound 21);

1(S),3(R)-Dihydroxy-19-nor-9,10-secocholesta-5,7(E),22(E),24-tetra-ene (Compound 22);

1(S),3(S)-Dihydroxy-9,10-secocholesta-5(Z),7(E),10(19),22(E),24-penta-ene (Compound 23);

1(S),3(R)-Dihydroxy-9,10-secocholesta-5(Z),7(E),10(19),16,22(E),24-hexa-ene (Compound 24);

1(S),3(R)-Dihydroxy-26,26,26,27,27-hexafluoro-9,10-secocholesta-5(Z),7(E),10(19),22(E),24-penta-ene (Compound 25);

3(S),26-Dihydroxy-9,10-secocholesta-5(Z),7(E),10(19),22(E),24(E)-penta-ene (Compound 26);

1(S),3(R)-Dihydroxy-20(R)-(4,4-dibromo-1,3-butadien-1-yl)-9,10-seco-pregna-5(Z),7(E),10(19)-triene (Compound 27);

1(S),3(R)-Dihydroxy-26,27-dimethyl-9,10-secocholesta-5(Z),7(E),10(19),22(E),24-penta-ene (Compound 28);

1(S),3(S)-Dihydroxy-26,27-dimethyl-9,10-secocholesta-5(Z),7(E),10(19), 22(E),24-penta-ene (Compound 29),

1(S),3(R)-Dihydroxy-24-methyl-26,27-methano-9,10-secocholesta-5(Z),7(E),10(19), 22(E),24-penta-ene (Compound 30),

1(S),3(R)-Dihydroxy-20(R)-(4,4-dichloro-1,3-butadien-1-yl)-9,10-seco-pregna-5(Z),7(E),10(19)-triene (Compound 31),

1(S),3(R)-Dihydroxy-26,27-ethano-9,10-secocholesta-5(Z),7(E),10(19), 22(E),24-penta-ene (Compound 32),

1(S),3(R)-Dihydroxy-26,27-propano-9,10-secocholesta-5(Z),7(E),10(19), 22(E),24-penta-ene (Compound 33), and

4(S),3(R)-Dihydroxy-20(S)-cyclopropylidenemethyl-9,10-seco-pregna-5(Z),7(E),10(19)-triene (Compound 34),

4(S),3(R)-Dihydroxy-20(R)-cyclopropylidenemethyl-9,10-seco-pregna-5(Z),7(E),10(19)-triene (Compound 35),

20(S),1(S),3(R)-Dihydroxy-26,26,26,27,27-hexafluoro-9,10-secocholesta-5(Z),7(E),10(19), 22(E),24-penta-ene (Compound 36).

15. (Previously presented) A compound according to claim 1 for use in therapy.

16. (Previously presented) A pharmaceutical composition comprising a compound according to claim 1, optionally another therapeutically active compound, and optionally a pharmaceutically acceptable carrier.

17. (Original) A composition according to claim 16, wherein said other therapeutically active compound is selected from amongst phosphate binders, steroids and anti-proliferative agents.

18. (Currently amended) A method for treatment or prophylaxis of diseases characterised by abnormal cell differentiation and/or cell proliferation, cancer, leukemia, mammary cancer, brain glial cancer, osteosarcoma, melanoma, myelofibrosis, psoriasis, primary hyperparathyroidism, secondary hyperparathyroidism, secondary hyperparathyroidism associated

with renal failure, diabetes mellitus, discoid and systemic lupus erythematosus, chronic dermatosis of autoimmune type, hypertension, acne, alopecia, skin aging, AIDS, neurodegenerative disorders, Alzheimer's disease, host versus graft and graft versus host reactions, rejections of transplants, steroid induced skin atrophy and osteoporosis, and inducing osteogenesis, the method comprising administering to a patient in need thereof an effective amount of a compound according to claim 1, optionally together with another therapeutically active compound.

19. (Previously presented) A method for treatment of prophylaxis of secondary hyperparathyroidism, the method comprising administering to a patient in need thereof an effective amount of a compound according to claim 1, optionally together with another therapeutically active compound.

20. (Original) A method according to claim 18, wherein secondary hyperparathyroidism is associated with renal failure.

21. (Previously presented) A method according to claim 18, wherein said other therapeutically active compound is selected from the group consisting of phosphate binders, steroids and anti-proliferative agents.

22. (Previously presented) The use of a compound according to claim 1, optionally together with another therapeutically active compound, in the manufacture of a medicament for the treatment or amelioration of diseases selected from the list consisting of diseases characterised by abnormal cell differentiation and/or cell proliferation, cancer, leukemia, mammary cancer, brain glial cancer, osteosarcoma, melanoma, myelofibrosis, psoriasis, primary hyperparathyroidism, secondary hyperparathyroidism, secondary hyperparathyroidism associated with renal failure, diabetes mellitus, discoid and systemic lupus erythematosus, chronic dermatosis of autoimmune type, hypertension, acne, alopecia, skin aging, AIDS, neurodegenerative disorders, Alzheimer's disease, host versus graft and graft versus host reactions, rejections of transplants, steroid induced skin atrophy and osteoporosis, and for inducing osteogenesis.

23. (Original) The use according to claim 22, wherein said other therapeutically active compound is selected from amongst phosphate binders, steroids and anti-proliferative agents.